

IN THE SPECIFICATION

Please replace the abstract with the following amended abstract:

A processor includes controller circuitry operative to control performance monitoring for at least one flow of cells or other protocol data units (PDUs) received by the processor. The controller circuitry includes a classifier and is operative to access memory circuitry associated with the processor. The classifier is configured to perform at least a first pass classification of at least a subset of the protocol data units PDUs. The controller circuitry in conjunction with a first pass classification of a protocol data unit PDU of a first type is operative to execute a first script, and in conjunction with a first pass classification of a protocol data unit PDU of a second type is operative to execute a second script different than the first script. A result of execution of at least one of the first and second scripts is stored in the memory circuitry. A performance monitoring output is generated, responsive to receipt of the protocol data unit of the second type, based at least in part on the result of execution of at least one of the first and second scripts. The performance monitoring output may be generated in conjunction with a second pass classification of the protocol data unit PDU of the second type, upon execution of an additional function or other type of script.